



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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Applicant : Bryan Spiess, et al.  
Serial No. : 10/068,243  
Filed : February 6, 2002 Group Art Unit: 3726  
For : CONVEYOR ROLLER Examiner: M. Jimenez  
Docket No. : A 490-003-PAT

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Commissioner of Patents and Trademarks  
Washington, D. C. 20231

**REPLY BRIEF**

**Argument:**

**Group 1 - Claim 6 rejected under 35 U.S.C. §112**

The responsive memorandum identifies "homogenous" as having multiple definitions, one of which can be interpreted inconsistent with the application. To arrive at the inconsistent interpretation, the Examiner was forced into ignoring the law as set forth in *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 979 (Fed. Cir. 1995). Binding authority must be followed. Accordingly, the rejection must be withdrawn.

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Specifically, [t]o ascertain the meaning of a claim, the governing authority considers three sources: **the claims, the specification, and the prosecution history.** *Id.* at 978 (citing *Unique Concepts, Inc. v. Brown*, 939 F.2d 1558, 1561 (Fed. Cir. 1991))(emphasis added).

Dictionary definitions are secondary and are not to trump the meaning from the specification. A court **may**, in its discretion, receive extrinsic evidence in order to aid it in coming to a correct conclusion as to the true meaning of the language employed in the patent. *Markman*, 52 F.3d at 980 (citing *Seymour v. Osborn*, 78 U.S. 516, 546 (1871)). Extrinsic evidence upon which a court may rely in construing patent claims consists of all evidence external to the patent and prosecution history, including expert and inventor testimony, dictionaries, and learned treatises. *Markman*, 52 F.3d at 980. Certainly a claim term should be interpreted in light of the specification and where possible in concert with the dictionary meaning.

The Examiner agrees that the application described the roller as being monolithic. Applicant and the Examiner agree that “monolithic” means solid and uniform. This definition is consistent with the term “homogenous”, which means “of the same or a similar kind or nature” or “uniform in structure or composition throughout.”<sup>1</sup> The disclosure goes to some length to explain that the roller is a solid piece of polymer with specific physical properties that are expressed in the claims. According to binding

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<sup>1</sup> Note: The Responsive Memorandum submitted a definition of homogenous and failed to draw attention to the second entry, which is consistent with the specification and the term monolythic, but inconsistent with the basis for the Examiner’s rejection.

precedent, “monolithic” and “homogenous”, which can be interpreted as being consistent are to be interpreted as being consistent.

The Section 112 rejection is based upon one of many possible interpretations of a dictionary definition. The Examiner’s interpretation is stated to be new matter, e.g. to not be disclosed in the application. Such interpretation violates the spirit and language of *Markman* and accordingly, the interpretation, not the claim, needs to be rejected.

The Section 112 new matter rejection must be withdrawn.

The Examiner in direct response to Applicant’s arguments, page 8 of the Response, asserts that Applicant changed from “monolithic” to “homogenous” to broaden the scope of the invention, beyond that found in the description of the invention.

[A]ppellant is attempting to cover more than what was originally disclosed because there are multiple definitions for the word “homogenous”.

Response, p.8 At best the Response is misleading.

Applicant very clearly stated the law and has been objecting to the Examiner’s interpretation as going outside the bounds of the description. Applicant has been asking for the invention to be interpreted in light of the specification.

Specifically, [t]o ascertain the meaning of a claim, the governing authority considers three sources: **the claims, the specification, and the prosecution history.** *Id.* At 978 (citing *Unique Concepts, Inc. v. Brown*, 939 F.2d 1558, 1561 (Fed. Cir. 1991))(emphasis added).

Cited in Applicant’s principal memorandum at p. 4. The Examiner, not the Applicant, is relying on the dictionary to the exclusion of the application.

The Section 112 rejection should be withdrawn.

**Group 2- Claims 7, 10 and 13 rejected under 35 U.S.C. §102 as being anticipated by Thompson et al. (4,203,509)**

***"a roller fabricated from a polymeric material"***

Concerning claim 7 the Examiner and Applicant are apparently engaged in confusion over two prepositional words "from" and "with". Applicant's roller is fabricated "from" a polymeric material. Thompson et al. is not fabricated "from" a polymeric material, but rather is fabricated "with" a polymeric material. That is, the polymer of Thompson et al. has a "polymeric tire" over a metal body and that polymeric tire is not capable of supporting a full load. Claim 7 uses the word "from".

"From" means "used to indicate a source, cause, agent or instrument" ex. *A note from the principal (dictionary example) or a roller fabricated from a polymer* (Claim 7 language of present invention).

"With" means "accompanying" ex. *took a dog with us* (dictionary example) or *roller having a metal body with a polymeric tire* (Thompson et al.).

The roller of Thompson et al. is a metal body 10 **with** a polymeric tire. Column 2, lines 34-48. Claim 7 of the present application claims a roller fabricated **from** a polymeric material. Notably, the Thompson et al. polymeric tire has been shown to not be suitable as a roller for various reasons including weight support. Principle Memorandum at p. 7, citing Thompson et al. Col. 2, line 66 - Col. 3, line 14<sup>2</sup>.

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<sup>2</sup> The Examiner responded to this issue on page 9, first full paragraph, citing to col. 1, lines 7-9 of Thompson et al. A verification of the cite the Examiner's statement and Thompson et al. shows that Thompson et al. is being mis-cited.

Applicant's interpretation of the word "from" in claim 7 is consistent with Applicant's interpretation of "homogenous", e.g. solid structure, while the Examiner's interpretation of "from" in claim 7 is consistent with the Examiner's interpretation of the word "homogenous", e.g. multi-layered. The law still applies that the terms of the claims need to be interpreted in light of the specification, which the Applicant and Examiner agree describes a solid structure. Specifically, [t]o ascertain the meaning of a claim, the governing authority considers three sources: **the claims, the specification, and the prosecution history.** *Id.* at 978 (citing *Unique Concepts, Inc. v. Brown*, 939 F.2d 1558, 1561 (Fed. Cir. 1991))(emphasis added). The disclosure is clear that "a roller from a polymeric material" means a solid structure, not the layered structure of Thompson et al.

### ***physical properties of claims 7 and 13***

Applicant and the Examiner agree that Thompson does not explicitly disclose any of the physical properties found in all the claims. The Examiner asserts that Thompson "inherently" discloses the physical properties, relying on a *prima facie* showing that was rebutted in the principal memorandum..

The examiner relies on those polymers that are suitable for a generic use of a roller, citing to the second full paragraph of the application on page 5. Applicant drew the Examiner's attention to the statement on page 9, lines 3-6 of the application. The Examiner states:

"There is no indication that one polymer is better than another."

- (Last sentence of last full paragraph on page 6 of the Response)(see also Response, p. 5, claiming all polymers have the same physical properties.).

Applicant has disagreed and again identifies the application, (page 9, lines 3-6), certain polymers are identified as being better than another polymer with regard to aircraft rollers.

The strengths in terms of compressibility, impact strength, and flexural strength are provided assuming the roller is the preferred roller and is being used on an aircraft conveyor for cargo. Other sized rollers and alternate uses may alter the strengths needed.

The particular physical properties were identified in applicant's declaration filed March 19, 2003 as being important to aircraft rollers differentiated from standard use. The application and declaration are replete with such distinctions and further explanations as to why certain physical properties are needed for aircraft rollers.

Ultimately, this disagreement on physical properties again is reduced to the division of whether homogenous is a single solid structure or a layered structure. The Examiner asserts: "It is noted in Fig. 1 of Thompson et al., there is clearly shown a roller fabricated **from** a polymeric material 17." p. 9, second full paragraph, last sentence (emphasis added).

The Examiner then cites: "Where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a *prima facia* case of either anticipation or obviousness has been established." (Citations found on page 10 of response). "When the PTO shows a sound basis for believing that the products of the applicant and the

prior art are the same, the applicant has the burden of proving they are not.” (Citations found on page 10 of response).

Applicant has shown the Thompson et al. roller is a metal body **with** a polymeric tire, e.g. multi-layered, and that claim 7 describes a roller fabricated **from** a polymeric material, e.g. solid and uniform. Metal has long been known to not be “identical in structure or composition” to polymer. Notably, the Thompson et al. polymeric tire has been shown to not be suitable as a roller for various reasons including weight support. Principle Memorandum at p. 7, citing Thompson et al. Col. 2, line 66 - Col. 3, line 14. Applicant has shown that the specification supports the distinction. Applicant has further shown that such distinction is required by binding authority.

The prima facie case relied upon to find the physical properties within the four corners of Thompson et al. has been rebutted with:

- 1) direct statements from the specification distinguishing general use and aircraft rollers, noting that polymers have differing physical properties;
- 2) declaration of the inventors; and
- 3) Thompson et al’s effort to teach away from making a roller **from** polymer through giving reasons why it won’t work and only using the polymer as a tire over a metal roller.

The claims and specification incorporate the patentable distinctions. The Examiner after having been rebutted only re-presents the prima facie case, which is insufficient to overcome the rebuttal.

**Group 3 - Claims 1-6 were rejected under 35 U.S.C. §103 over Thompson et al. in view of Rowles (6,354,424)**

Claims 2-5 depend from claim 1. Claim 1 reads in pertinent part:

1) An aircraft roller system [having at least one operable roller unit, each roller unit]

comprising:

- a. a roller adapted to communicate cargo into and out of an aircraft, the roller being cylindrical in shape having a length and a diameter, the roller having a center aperture extending through the length of the roller and  
**the roller being fabricated from a polymer, the polymer having a burn rate of less than 4.0 inches per minute, a compressibility strength of at least 200 psi, impact strength of at least 0.5 (ft.lbs.)/inch, flexural strength of at least 20 psi;...**

(emphasis added). Thompson et al. does not disclose "the roller being fabricated from a polymer" as described above. Thompson et al. does not disclose the physical properties and in fact teaches away from them (Column 2, line 63 - Column 3, line 14) as described above.

Claim 6 reads:

6) An aircraft roller comprising:

**a homogenous roller having:**

- i. an outer housing constructed from a **polymer selected from the group consisting of polysulfone, polyetherimide, polyetherketone, polyphenylene sulfide and polyvynilidene**

**fluoride, the polymer having a burn rate of less than 4.0 inches per minute, a compressibility strength of at least 200 psi, impact strength of at least 0.5 (ft.lbs.)/inch, flexural strength of at least 20 psi;**

ii. the outer housing further having a central aperture disposed longitudinally therethrough; and

iii. a bearing located surrounding the central aperture and attached to the outer housing;

a roller rack joined to the roller; and

an aircraft operably joined to the roller rack.

Thompson et al. does not show a homogenous roller within the meaning of the claim or the description. (See Group 1 discussion above). Thompson et al. does not show the physical properties within the meaning of the claim or the description. (See Group 2 discussion above).

**Group 4 - Claims 8 and 9 were rejected under 35 U.S.C. §103 as being unpatentable over Thompson et al. in view of Rowles.**

Claims 8 and 9 depend from claim 7, which is addressed above (Group 2) with regard to Thompson et al. Thompson et al. does not disclose a homogenous roller or the physical properties. Rowles fails to teach the homogenous roller or physical properties as well.

**Group 5 - Claims 11 and 12 were rejected under 35 U.S.C. §103 as being unpatentable over Thompson et al.**

Claims 11 and 12 depend from claim 7 and identify particular polymers depend from claim 7. Claim 7 is allowable over Thompson et al. for the reasons described above with regard to the rejection of claim 7 and whether it is anticipated by Thompson et al. (Group 2 above).

**CONCLUSION**

The present application should be allowed as it stands. The Examiner should not apply a meaning to the word "homogenous" that differs from the clear meaning of the specification, using a secondary source to trump a primary source. The Examiner has not found a reference or combination thereof teaching applicant's invention, namely that a functional aircraft roller can be made from polymer with particular physical properties. The Examiner's assertion that all members of the nylon family have the same physical properties needs to be withdrawn, since his *prima facie* case has been rebutted..

**REQUEST**

Applicant further made his request under 37 C.F.R. §1.104(d)(2) for an appropriate affidavit from the Examiner. This affidavit is required when requested.

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